

P-7.10 Identify the parts of the eye and explain their function in image formation.

Revised Taxonomy Level 1.2 A Recognize (Identify) factual knowledge

2.7 B Explain conceptual knowledge

Students did not address this indicator in physical science

It is essential for students to

- ❖ Understand the function of the parts of the eye,
 - Cornea
 - Lens
 - Iris
 - Retina
 - Fovea
 - Blind spot
- ❖ Explain how the parts of the eye work together
- ❖ Diagram and label the part of the eye
- ❖ Explain vision defects and how optical devices help to correct them
 - Farsightedness
 - Nearsightedness
 - astigmatism

Assessment

The verb explain means that the major focus of assessment should be for students to “construct a cause and effect model”. In this case, assessments will ensure that students can model the human eye and in a way that illustrates how all of the parts work together. Because the indicator is written as conceptual knowledge, assessments should require that students understand the “interrelationships among the basic elements within a larger structure that enable them to function together.” In this case, assessments must show that students can construct a cause and effect statement relating to the effect that each part of the human eye has on producing vision.